

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 08/18/2004

		•		
APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,191	02/06/2004	James T. Hamilton	2026/41553/1	7211
279 7	590 08/18/2004		EXAMI	INER
TREXLER, E	BUSHNELL, GIANG	ALIE, GHASSEM		
BLACKSTON	E & MARR, LTD.			
105 WEST ADAMS STREET			ART UNIT	PAPER NUMBER
SUITE 3600			3724	
CHICAGO, II	60603			

Please find below and/or attached an Office communication concerning this application or proceeding.

				مبطيرا			
		Application No.	Applicant(s)	4			
Office Action Summary		10/774,191	HAMILTON ET A	AL.			
		Examiner	Art Unit				
		Ghassem Alie	3724				
Period fo	The MAILING DATE of this communication Reply	on appears on the cover	sheet with the correspondence a	ıddress			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)⊠	Responsive to communication(s) filed or	n the filling date of the a	pplication .				
· <u> </u>	•	This action is non-fina					
3)□	Since this application is in condition for a	allowance except for for	mal matters, prosecution as to the	ne merits is			
•	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims						
5)□ 6)⊠ 7)□							
Applicat	ion Papers						
10)⊠	The specification is objected to by the Ex The drawing(s) filed on <u>06 February 2004</u> Applicant may not request that any objection Replacement drawing sheet(s) including the The oath or declaration is objected to by	4 is/are: a) accepted to the drawing(s) be held correction is required if the	in abeyance. See 37 CFR 1.85(a). e drawing(s) is objected to. See 37 (	CFR 1.121(d).			
Priority	under 35 U.S.C. § 119						
12)□ a)	Acknowledgment is made of a claim for f  All b) Some * c) None of:  1. Certified copies of the priority doc  2. Certified copies of the priority doc  3. Copies of the certified copies of the application from the International See the attached detailed Office action for	uments have been rece uments have been rece le priority documents ha Bureau (PCT Rule 17.2	ived. ived in Application No ave been received in this Nationa (a)).	al Stage			
2) Notice 3) Infor	nt(s) ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-8 mation Disclosure Statement(s) (PTO-1449 or PTO er No(s)/Mail Date	948) /SB/08) 5) 🔲	Interview Summary (PTO-413) Paper No(s)/Mail Date Notice of Informal Patent Application (P	TO-152)			

Art Unit: 3724

#### Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-17, drawn to a rotary cutting product including a rotary cutting die magnetically mounted on a metal cylinder, classified on class 83, subclass 24.
- II. Claim 19, drawn to a method of mounting a rotary cutting die on a metal cylinder, classified in class 83, subclass 13.
- 2. Claims 18 and 20 link inventions I and II. The restriction requirement between the linked inventions is subject to the nonallowance of the linking claims 18 and 20. Upon the allowance of the linking claim, the restriction requirement as to the linked inventions shall be withdrawn and any claim(s) depending from or otherwise including all the limitations of the allowable linking claim(s) will be entitled to examination in the instant application. Applicant(s) are advised that if any such claim(s) depending from or including all the limitations of the allowable linking claim(s) is/are presented in a continuation or divisional application, the claims of the continuation or divisional application may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

The inventions are distinct, each from the other because of the following reasons:

3. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the

Art Unit: 3724

product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case (2) applies because the product as claimed can be made by another and materially different process. For example, the step of tapping the rotary die plate for repositioning the die plate on the metal cylinder can be done by another process such as prying or pushing action on the die plate that repositions the die plate on the metal cylinder.

- 4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
- During a telephone conversation with Mr. David J. Marr (Reg. No. 32,915) on 8/11/04 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-17. Affirmation of this election must be made by applicant in replying to this Office action. Claim 19 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
- 6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

## Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 3724

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Sardella et al. (4,744,297), hereinafter Sardella. Regarding claim 1, Sardella teaches a rotary die plate 48 mountable on a metal cylinder 46 and the rotary die plate 48 has an inner surface which is magnetically attractable and magnetically mountable on the metal cylinder 46. The die plate also includes the magnetic plate 73 which is magnetically mounted on the metal cylinder 46. See Figs. 9-12 and col. 5, lines 34-68 and col. 6, lines 1-51 in Sardella.

Regarding claim 8, Sardella teaches everything including that the rotary die plate is configured such that the rotary plate is mountable on the metal cylinder without having to use screws or clamps. See Fig. 9 in Sardella.

9. Claims 1, 8, 9, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Kang (3,850,059). Regarding claim 1, Kang teaches a rotary die plate 20, 34 mountable on a metal cylinder 14 and the rotary die plate 20, 34 has an inner surface which is magnetically attractable and magnetically mountable on the metal cylinder 14. The die plate also includes the magnetic plate 20 which is magnetically mounted on the metal cylinder 14. See Figs. 1-3 and col. 2, lines 64-68 and col. 3, lines 1-14 in Kang.

Regarding claim 8, Kang teaches everything including that the rotary die plate is configured such that the rotary plate is mountable on the metal cylinder without having to use screws or clamps. See Fig. 1 in Kang.

Application/Control Number: 10/774,191

Art Unit: 3724

Regarding claim 9, Kang teaches everything noted above including that the rotary die plate 20, 34 has an outer surface and a cutting blade 34 is on the outer surface of the die plate 20, 34. See Fig. 1 in Kang.

Regarding claim 18, Kang teaches everything noted above including the method of mounting a rotary cutting die 34 on a metal cylinder 14 and the step of bringing the inner surface of the rotary die 20, 34 in close enough proximity to the metal cylinder such that the rotary cutting die becomes magnetically mounted thereon. See Figs. 1-3 in Kang.

Claims 1, 6, 8, 9, 16, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Fuller (5,555,786). Regarding claim 1, Fuller teaches a rotary die plate 8a, 8b mountable on a metal cylinder 10a and the rotary die plate 8a, 8b has an inner surface 24a which is magnetically attractable and magnetically mountable on the metal cylinder 10a. See Figs. 1-10 and col. 5, lines 3-67 and col. 6, lines 1-65 in Fuller.

Regarding claim 6, Fuller teaches everything including that the rotary die plate 8a, 8b has an outer surface and a cutting blade 9a, 9b is mountable on the outer surface. See Figs. 3-7 in Fuller.

Regarding claims 8, Fuller teaches everything including that the rotary die plate 8a, 8b is configured such that the rotary plate is mountable on the metal cylinder without having to use screws or clamps. See Figs. 3-7 in Fuller.

Regarding claim 9, Fuller teaches everything in claims 1 and 6.

Regarding claim 16, Fuller teaches everything in claim 8.

Regarding claim 18, Fuller teaches everything noted above including the method of mounting a rotary cutting die 8a, 8b on a metal cylinder 10a and the step of bringing the

Application/Control Number: 10/774,191

Art Unit: 3724

inner surface 24a of the rotary die in close enough proximity to the metal cylinder such that the rotary cutting die becomes magnetically mounted thereon. See Figs. 3-7 in Fuller.

## Claim Rejections - 35 USC § 103

- 11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 12. Claims 2, 3, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller. Regarding claims 2 and 11, Fuller teaches everything noted above including a plurality of magnetic elements 15 that configured to make the die plate 8a, 8b magnetically attractable to the metal cylinder 10a. See Fig. 7 in Fuller. Fuller does not teach that the magnetic elements are in the rotary die plate. Instead, Fuller teaches that the magnetic elements are in the metal cylinder. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the magnetic elements of the metal cylinder for the rotary die plate, since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. *In re Einstein*, 8 USPQ 167. In addition, the used of magnetic elements in the die plate or the like is well known in the art such as is evident in Okonski et al. (5,505,109), hereinafter Okonski. Okonski teaches a magnetic elements inside a cutter or die 10 which is magnetically connected to a metal cylinder 12. See Fig. 1 in Okonski.

Application/Control Number: 10/774,191

Art Unit: 3724

Regarding claims 3 and 12, Fuller teaches everything including that the magnetic elements 15 are disposed proximate the inner surface of the die plate 8a, 8b. See Figs. 3-7 in Fuller.

Page 7

- 13. Claims 4, 5, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller, as applied to claim 2, and in further view of Huang (2003/0209112). Regarding claims 4, 5, 13, and 14, Fuller as modified above teaches everything noted above except that the magnet elements are neodymium magnets. However, the use of neodymium magnets to mount a surface on a metallic surface is well known in the rat such as taught by Huang. Huang teaches neodymium magnetic elements 13, 22 for mounting a surface to a metallic surface 41. See Figs. 1-3 and page 1, paragraph 16 in Huang. It would have been obvious to a person of ordinary skill in the art to replace the magnet elements of Fuller's rotary die plate, as modified above, with the neodymium magnets as taught by Huang in order to ensure a strong bound between the die plate and the metal cylinder since the metal neodymium magnets have strong magnetic attraction.
- 14. Claims 7 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller in view of Kuriyama (2002/0054470). Regarding claims 7 and 15, Fuller teaches everything noted above except that the rotary die is formed of a solidified resin. However, the use of plates formed from solidified resin is well known in the art such as taught by Kuriyama. Kuriyama teaches a solidified resin holding plate 7. See Figs. 50-55 and page 9, paragraph 0202 in Kuriyama. It would have been obvious to a person of ordinary skill in the art to formed Fuller's rotary die plate of a solidified resin as taught by Kuriyama in order to ensure that the plate is more resistance to stress. In addition, it would have been obvious to

Art Unit: 3724

one having ordinary skill in the art at the time the invention was made to form the plate of a solidified stress, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. See also *Ballas Liquidating Co. v. Allied industries of Kansas, Inc.* (DC Kans) 205 USPQ 331.

- 15. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller in view of Kapolnek (6,067,887). Regarding claim 10, Fuller teaches everything noted above except connectors engaged with the cutting blade and the outer surface of the rotary die plate. However, the use of connector with the cutting blade is well known in the art such as taught by Kapolnek. Kalponek teaches a rotary cutting die 10 including connectors 24 for holding the cutting blade 16. See Fig. 1 and col. 3, lines 23-51 in Kapolnek. It would have been obvious to a person of ordinary skill in the art to provide Fuller's rotary die plate with the connectors as taught by Kapolnek in order to reinforce the rotary die plate and secure the cutting blade in the rotary die plate.
- 16. Claims 17, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sardella in view of Kang. Regarding claims 17, 18, and 20, Sardella teaches a rotary die plate 48 mountable on a metal cylinder 46 and the rotary die plate 48 has an inner surface which is magnetically attractable and magnetically mountable on the metal cylinder 46. The inner surface of the die plate 48 is magnetically mounted on the metal cylinder 46. Sardella also a magnetic member 73 on the metal cylinder 46 in contact with the rotary die 48 and the magnetic member 73 configured to reduce creeping of the rotary cutting die 48 along the metal cylinder 46 while the die plate 48 is rotating. See Figs. 9-12 and col. 5, lines 34-68 and

Page 9

col. 6, lines 1-51 in Sardella. Sardella does not expressly teach that die plate has a cutting blade. However, the use of rotary die plates having cutting blades is well known in the art such as taught by Kang. Kang teaches a rotary die plate 20, 34 has an outer surface and a cutting blade 34 is on the outer surface of the die plate 20, 34. See Fig. 1 in Kang. It would have been obvious to a person of ordinary skill in the art to provide Sardella's rotary die plate with the cutting blade as taught by Kang in order to cut various desired shaped out of the material being cut.

#### Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Leanna (4,831,930), Kang (5,379,671), Okonski et al. (RE38,033), Okonski (6,026,725), Jones et al. (3,826,170), Fokos et al. (5,001,950), Hardisty et al. (5,230,271), Gaug (3,969,474) teach a rotary die plate magnetically mounted on a metal cylinder.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ghassem Alie whose telephone number is (703) 305-4981. The examiner can normally be reached on Mon-Fri 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan Shoap can be reached on (703) 305-1082.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9302 for After Final communications.

Art Unit: 3724

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.

GA/ga

August 12, 2004

Allan N. Shoap Supervisory Patent Examiner Group 3700